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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,990	03/05/2002	Ron Rymon	02/23/292	4478
67801 7590 12/23/2008 MARTIN D. MOYNIHAN d/b/a PRTSI, INC. P.O. BOX 16446 ARLINGTON, VA 22215				
EXAMINER				
HOANG, PHUONG N				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/087,990

Applicant(s)

RYMON, RON

Examiner

PHUONG N. HOANG

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. Claims 1 – 35 are pending for examination. This office action is in response to after final amendment filed 11/3/2008.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The following terms lack proper antecedent basis:
 - i. said node – claim 27;

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 30 – 31, 34 – 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone, US pub. no. 2003/0233439.**

6. **As to claim 30**, Stone teaches a group discovery method discovering groups according to an initially unknown structure in existing electronically held data, said electronically held data comprising nodes partitioned into first and second data sets, wherein links exist within said data between nodes in said first data set and nodes in said second data set, the initially unknown structure being within said links, the method comprising:

electronically searching said data (search engine, 0056, 0077, 0093); and
grouping nodes in said first set according to respective links such that all nodes in said first set having links to at least two commonly held nodes in said second set are assigned to a same group, thereby discovering groups in said data according to said initially unknown structure (template can be used to form new groups that have similar attribute value, 0094).

Stone does not explicitly teach the grouping step is done automatically.

However, Stone teaches the grouping is done using the search engine (0056, 0077, 0093).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize that the grouping process is automated because it is the administrator does not have to manually group the user.

7. **As to claim 31**, Stone teaches a method of grouping users having links or attributes into one or more groups based on said links or attributes, the method comprising:

providing a group for users sharing all of a subset of at least two of said links or attributes (user group access one or more applications, 0056 - 0057, 0060 – 0061, 0084, 0089, 0095);

outputting said provided groups (template can be used to form new groups, 0094, 0095).

Stone does not explicitly teach the grouping step is done automatically.

However, Stone teaches the grouping is done using the search engine (0056, 0077, 0093).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize that the grouping process is automated because it is the administrator does not have to manually group the user.

8. **As to claim 34**, this is the method claim of claim 30. See rejection for claim 30 above.

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9. **As to claim 35**, this is the apparatus claim of claim 30. See rejection for claim 30 above.

10. Claims 1 - 6, 25 – 27, 29, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone, US pub. no. 2003/0233439 in view of Dan, US patent no. 6,560,639.

11. **As to claim 1**, Stone teaches a computer apparatus configured to discover roles from structure existing amongst users to whom resources have been assigned, the apparatus comprising:

a processor,

an input for receiving a set of nodes and of resources users (manage user... links to documents, resources, 0060, 0077 – 0078), each user of said set comprising a node with an assignment of resources the sets being partitioned, one part comprising said users and one part comprising said resources, said assignments being incorporated as links between respective users and resources over said partitioning, and

a discovery unit associated with said input configured for automatically searching for patterns within said links between said users and said resources (search engine, 0056, 0077, 0093);

a grouping unit, associated with said discovery unit, configured to use said discovered patterns to form at least one group from said user nodes or said resource nodes using said automatically discovered patterns (template can be used to form new user group, 0093 - 0095), such that users or resources having all of a subset of at least two links to common resources or users are placed into a same group (assign user rights and group rights to accessing or editing corresponding data, 0063, 0089);

an output unit configured for outputting said group of users or resources as a role (new groups, 0094).

Stone does not explicitly teach a processor.

Dan teaches a processor (processor, col. 28 lines 52 – 65 and col. 29 lines 25 - 45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Stone and Dan because Dan' processor would perform the calculation and logic operations required to execute the program (col. 28 lines 52 – 65).

12. **As to claim 2**, Stone teaches wherein said relationships are access permissions (permissions, 0059).

13. **As to claims 3 - 5**, Stone teaches wherein of a network, said resources and said relationships are usage levels of respective resources by respective users (network, 0097).

14. **As to claim 6**, Stone teaches wherein said nodes comprise entities having attributes, and said relationships represent a respective user possessing a respective attribute (assign user rights and group rights to accessing or editing corresponding data, 0063, 0089).

15. **As to claim 25**, this is the method claim of claim 1. See rejection for claim 1 above.

16. **As to claim 26**, this is the hardware claim of claim 1. See rejection for claim 1 above.

17. **As to claim 27**, Stone teaches a computer device comprising:

- a first series of user definitions, each user in said definitions defined as a user node (user, 0094 - 0095);
- a second series of resource definitions, each resource in said definitions defined as a resource node (applications, 0094 - 0095);
- access data indicating access of users to respective resources (user group that have similar attribute values or application access, 0094);
- a pattern recognition unit operable with said processor for automatically discovered pre-existing patterns in said access data (template, 0094 - 0095) said patterns indicative of a way of grouping said nodes so as to discover groups of nodes

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having common subsets of at least two resources group of resources that are assigned in common to a group of users (template can be used to form new group, 0094), and a group definition unit (user group, 0094 – 0095).

Stone does not explicitly teach a processor.

Dan teaches a processor (processor, col. 28 lines 52 – 65 and col. 29 lines 25 - 45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Stone and Dan because Dan' processor would perform the calculation and logic operations required to execute the program (col. 28 lines 52 – 65).

18. **As to claim 29**, Stone teaches pattern recognition apparatus for grouping nodes according to relationships with other nodes, the apparatus comprising:

an input for receiving nodes partitioned into a first set and a second set and with relationships between nodes in respective first and second sets defined by links across said partition (manage user with links to documents, resources, 0060, 0077 – 0078) and;

using pattern recognition on said links to find relationship patterns (search engine, 0056, 0077, 0093) within said links, and from said patterns to form at least one group (template can be used to form new user group, 0094 - 0095) from nodes of said first set, wherein said nodes being formed into said group share relationships with at

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least two nodes in said second set (user group of users include at least two or more users, 0094, 0061).

Stone does not explicitly teach a processor.

Dan teaches a processor (processor, col. 28 lines 52 – 65 and col. 29 lines 25 - 45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Stone and Dan because Dan's processor would perform the calculation and logic operations required to execute the program (col. 28 lines 52 – 65).

19. **As to claim 33**, Stone teaches wherein said outputting said group comprises outputting a characteristic of said group (new groups, 0094).

20. **Claims 7 – 12, 17 – 19, 28, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone, US pub. no. 2003/0233439 in view of Dan, US patent no. 6,560,639, and further in view of Gerba, US pub. no. 2002/0040389.**

21. **As to claim 7**, Stone and Dan do not explicitly teach a search tree to begin with a single resource and its associated users, and iteratively to add resources and remove users not having a predefined relationship with said iteratively added resources, to meet a resource number.

Gerba teaches a search tree to begin with a single resource and its associated users, and iteratively to add resources and remove users not having a predefined relationship with said iteratively added resources, to meet a resource number (0054, 0081, 0102).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Stone, Dan, and Gerba because Gerba's network structure tree arranges the data in tree form when in use and is preferably maintained in a memory suitable for quick access such as RAM, And having a network structure database allows the node to store the last used tree and to make periodic updates to quickly rebuild the network structure tree if required (0081).

22. **As to claims 8 - 9**, Gerba teaches the search engine is operable to use a homogeneity measure to determine whether to consider a candidate (homogenous, 0056).

23. **As to claims 10 - 12**, Stone teaches wherein said search engine is operable within said iterative stages to add further resources common to a current set of users (0056).

24. **As to claims 17 - 19**, see rejection for claims 7, 10 and 12 above.

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25. **As to claim 28**, Stone teaches wherein said role comprises said users or said resources sharing only said subset (0056).

26. **As to claim 32**, see rejection for claim 7 above.

Claim Rejections - 35 USC § 103

27. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

28. **Claims 20 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone, US pub. no. 2003/0233439 in view of Dan, US patent no. 6,560,639, and further in view of Brown, US patent no. 5,941,947.**

29. **As to claim 20**, Stone and Dan do not explicitly teach the step of wherein the input is associated with a graphical expositor which presents the input in a graph.

Brown teaches the steps of wherein the graphical expositor presents the input in a graph (acyclic graphs, col. 12 lines 51 – col. 13 line 38).

It would have been obvious to one of skill in the art at the time the invention was made to combine the teaching of Stone, Dan, and Brown's system because Brown's graph would provide the graph structure with partitioned groups on different levels for easy input to the tree structure of Stone's system to control the network nodes partitions and searchable.

30. **As to claim 21**, Stone teaches the user would manually interact using graphical to manually assign modify the groupings discovered by the pattern recognition engine (administrator adds user, 0038).

31. **As to claims 22 - 23**, Brown teaches the steps of wherein the graphical expositor is further operable to partition the graph into sub-graphs (acyclic graphs, col. 12 lines 51 – col. 13 line 38), each of the sub-graphs itself being a mentioned graph having at least two partitions, sub-graphs being limited to it subset of the nodes in one of the partitions, and further comprising all the nodes in the other partition that are linked thereto, and wherein the pattern recognition unit is further operable to perform groupings on each of the sub-graphs, and then to merge the results into a full graph.

32. **As to claim 24**, see rejection for claim 21 above.

Allowable Subject Matter

33. Claims 13 – 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

34. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUONG N. HOANG whose telephone number is (571)272-3763. The examiner can normally be reached on Monday - Friday 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng A. An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Li B. Zhen/
Primary Examiner, Art Unit 2194

/P. N. H./
Examiner, Art Unit 2194